DOCUMENT RESUME

ED 183 265 PS 011 240

AUTHOR Corsini, David A.: Doyle, Karen
TITLE Temperament Traits of Preschool Children: Across Setting Consistency.
PUB DATE Mar 79
NOTE 10p.: Paper presented at the Biennial Meeting of the Society for Research in Child Develcpment (San Francisco, CA, March 15-18, 1979)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Adjustment (tc Environment): Early Childhood Education: Emotional Adjustment: *Individual Characteristics: *Measurement Instruments: *Mother Attitudes: *Personality: Physical Activity Level: *Preschool Children: Rating Scales: Self Control: Social Behavior: *Teacher Attitudes: Validity
IDENTIFIERS *Temperament

ABSTRACT

The study described in this paper examined the degree to which temperament trait characteristics of young children are perceived in a similar way by mothers and preschool teachers. Temperament ratings were obtained from mothers and from preschool teachers for 38 preschool children between the ages of 2 1/2 and 5 years of age. The children were part of a University based child care program, and the teachers had had at least six months experience with each child. Measurement instruments included both the EASI Temperament Survey of Buss and Plomin, adapted for use by parents and teachers, and a new survey created for this study. Combined, these measures contained nine termperament scales -- two each for the traits of emotionality, activity, impulsivity, and sociability, plus one for adaptability. One main finding was that parent and teacher ratings correlated on emotionality, activity, impulsivity and sociability. A more detailed analysis revealed that parents found these four temperament traits to be distinct and separate dimensions while the teachers did not. It was concluded that the results offer modest support for the validity of temperament traits. (JMB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED183265

Temperament Traits of Preschool Children: Across Setting Consistency

David A. Corsini and Karen Doyle

University of Connecticut

Our study is concerned with measuring the degree to which temperament trait characteristics of young children are perceived in a similar way by mothers and preschool teachers. In a sense the study can be thought of as a validity study of the temperament trait constructs; that is, if temperament traits describe relatively persistent individual characteristics, then those characteristics should be evident to both parents and teachers. Our study has its roots in the seminal work of Thomas, Chess & Birch and their New York Longitudinal Study in which they talk of temperament traits such as activity, rhythmicity, adaptability and mood. However, our study is more closely related conceptually to the more recent work of Buss and Plomin as presented in their 1975 book: A Temperament Theory of Personality Development. In this book Buss & Plomin argue for a system which includes four temperament traits: Emotionality, Activity, Sociability, and Impulsivity. In children these traits are measured by what they refer to as the EASI Temperament Survey. In this procedure parents are asked to rate their child in terms of how characteristic certain styles of behavior are for their children; for example, "Child is always on the go." Five ratings are made for each temperament.

Briefly, for 38 preschool children between the ages of 2½ and 5 years of age, we obtained mother ratings on the EASI Temperament Survey and preschool teacher ratings on the same survey. The children were part of a University based child care program and the teachers had had at least six months experience with the child. The analysis was correlational. One main finding from the study was that the ratings of parents and teachers were significantly correlated on all four traits. The correlations were highest for Activity r = .51 — the other three correlations were in the thirties (Table 2).

PS 01240

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

David A. Corsini

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The study was a little more complex than described to this point — I will try to give a sense of what else was done and why. From a more detailed analysis of our findings, we feel we have evidence that the parents found the four temperament traits to be distinct and separate dimensions while the teachers did not. For us this raises some important theoretical and methodological issues.

One of the central questions with respect to temperament traits is: How many separate temperament traits are there: Thomas & Chess originally proposed nine different traits— others have argued for two, Buss & Plomin argue for four. Regardless of how many traits one finds it useful to conceptually distinguish, the next step is the empirical determination of the independence of the traits. For the Buss & Plomin traits as measured by their EASI Temperament Survey they found significant overlap in their studies for impulsivity and activity, emotionality and impulsivity, and emotionality and sociability. From inspection of their data and the particular behaviors asked about to assess their traits, we felt that we could decern some of the reason for the overlaps. For example, it could be argued that the behavior "Child fidgets at meals and similar occasions," which in the EASI survey is part of the activity scale, also makes sense as an indication of impulsivity.

We also noted that the items for several of the traits seemed to have a negative bias— For example, emotionality asked the parent to rate such things as crying easily, quick temper, easily upset and easily frightened. We felt emotionality might also include some less negative behaviors like: sensitivity and excitability. Thus, in our study we used both the EASI Temperament Survey of Buss & Plomin adapted only to make sense to both parents and teachers, and a new survey— We created our own scales for each of the four traits of Buss & Plomin and one trait we called Adaptability— a la Thomas & Chess. Thus, our data consisted of mother/teacher

ratings on nine temperament scales— 2 for each of the traits—emotionality, activity, impulsivity, and sociability and one for adaptability (Table 1).

In the analysis we performed intercorrelations of the nine scales for parents alone, teachers alone, and the correlations between the nine ratings of teachers and parents. In addition, we performed a factor analysis of the parent ratings and the teacher ratings. The details of the results of these analyses are too complex for oral presentation but allow me to characterize them.

For parents— the newly created subtests correlated significantly with the original EASI subtest of the same trait— correlations were around .50. The original EASI subtests of activity, sociability, and impulsivity were also significantly intercorrelated— a replication of the Buss & Plomin findings. None of our newly created subtests correlated significantly with each other. These data give some indication that we were relatively successful in creating subtests which measured the 4 traits distinctly— at least with parents.

For teachers more of the intercorrelations were significant. As with the parents the newly created subtests correlated with the original EASI subtests of the same trait— these correlations were around .70. With respect to the original EASI subtests it was again found that activity, sociability and impulsivity were significantly correlated as were emoticnality and impulsivity. With the new subtests, only two correlations were significant— emotionality and impulsivity and activity and impulsivity. Thus, on the whole our newly created subtests seemed to fare better at measuring the four traits in an independent fashion even though there was some overlap in the teacher ratings.

A factor analysis, with a orthogonal varimax rotation, was performed on the parent and teacher data - the nine subtest scores. While it is questionable that we had sufficient data in this study to justify factor analytic procedures, the

results appeared to have heuristic value. For parents a clear pciture emerged. Four factors emerged. The largest factor was Activity (28% variance). This factor loaded the two activity scales most strongly with moderate loadings for the original EASI subscales for impulsivity and emotionality. The second factor (21% variance) was clearly sociability— it loaded the two sociability scales with a moderate positive loading for the new adaptability scale. The third factor (17% variance) was emotionality and loaded only the two emotionality subtests. The fourth factor (11% variance) was impulsivity loading the two impulsivity subtests with a moderate negative loading for adaptability.

I wish I could tell you that the pattern with the teacher data was as clear but it was not. For teachers two main factors emerged. The first, accounting for 42% of the variance, loaded the two activity subtests, the two impulsivity subtests and a negative loading for adaptability. The second teacher factor, accounting for 30% of the variance, loaded four subtests— two positive and two negative. The two positive were the new emotionality subtest and the adaptability subtest— the negative loadings were the old emotionality subtest and the old impulsivity subtest.

The pattern of results which emerged in this study appear to indicate that parents can and do see their children distinctly with respect to the four temperament traits of emotionality, activity, sociability, and impulsivity. But work is still needed in creating good items to measure these in a distinct way.

Teachers, however, did not see the children distinctly on four traits but rather saw them as distinct on only two dimensions which did not correspond with the temperament traits.

The two dimensions appeared to be bipolor— One dimension having positive connotations for adaptability and one having negative connotations. Our adaptability scale asked for ratings with respect to the child's predictability,

ability to accept limits, and ability to adapt to change. Active and impulsive children (which the teachers did not distinguish) were perceived to be low in adaptability. Children high in adaptability had scores on other scales which indicated they were low on anxiety, high in self control, and a stable positive mood, and didn't show negative indicators of emotionality. Teachers appeared to be rating children not so much on temperament traits but with respect to how those temperament traits influenced adjustment to the preschool environment.

We feel the results of our study offer modest support for the validity of temperament traits. First, there was significant agreement between parents and teachers in their rating of the children. Clearly the highest agreement was with respect to the child's activity level. Agreement on ratings of the other three traits, while significant, was less dramatic. The second line of support for validity of the traits was seen in two ways — first, the low correlations between traits and second, the trait factor structure shown in the parent data. The data shows that parents clearly see their children as distinct with respect to the four temperament traits measured.

However, we should point out again that the degree of convergence between the teacher and parent ratings was not overwhelming. We suggest several possible reasons for this. First would be the operational definitions of the temperament traits. There is too much overlap in the four subtests of the EASI Temperament Survey— this was true of the data presented by Buss & Plomin in their book and in our data. Our newly designed subtests of the four traits showed less overlap between traits but there is still a great deal of work to be done to make the scales more discriminative. A second reason for the relatively low convergence between parent and teachers could be that the preschool environment restricts the expression of individual temperament characteristics. That is, every environment limits

the expression of certain behaviors or styles of behavior. Thus, temperament variability can be restricted by the degree to which a given environment puts limits on what or how behavior can be expressed. Parents may have experience with their children over a much wider range of environments than do the teachers.

A third possibility is that the preschool teachers had a restricted view of the individuality of the children and perceived the children not so much in terms of the specific temperament traits per se but rather in terms of the more global adaptive consequences of the traits with respect to the preschool environment.

In any case there is plenty of room for further research. We do feel that the temperament trait constructs are useful in getting a handle on the individual characteristics of children which, in interaction with a host of environmental forces, help to shape a child's development.

Table 1

ORIGINAL EASI SURVEY	MODIFIED EASI SURVEY	NEW SCALE
Part I: Emotionality	Part I: Emotionality	
1. Child tends to cry easily	1. Child tends to cry easily	6. Child does not show strong fluctuation in mood
2. Child has a quick temper	2. Child has a quick temper	7. Child appears to be very sensitive. That is, "feelings get hurt easily."
3. Child gets upset easily	3. Child gets upset easily	8. Child becomes uneasy or anxious in unfamiliar situations
4. Child is easily frightened	4. Child is easily frightened	9. Setting limits or disciplining the child often results in the child becoming angry or frustrated
5. Child is easy going or happy-go-lucky	5. Child is easy going or happy-go-lucky	10. Child becomes very excited in anticipation of special events (e.g. holidays, trips, presents, etc.)
Part II: Activity	Part II: Activity	
1. Child likes to be off and running as soon as he wakes up in the morning	1. Child is off and running as soon as the day begins	6. Child puts a lot of energy into everything
2. Child is always on the go	2. Child is always on the go	7. Child prefers climbing equipment to sandboxes or swings when at the playground
3. Child cannot sit still long	3. Child does not like to sit still long	8. Child usually moves from place to place by running
4. Child prefers quiet activities such as coloring or block-building to more active games	4. Child prefers quiet activities such as coloring or block-building to more active games	9. In inside areas, the child uses furniture and other things for climbing and jumping activities
5. Child fidgets at meals and similar occasions	5. Child is usually restless at quiet activities (e.g. meals, storytime, church)	10. When in the company of one or more other youngsters, the child does a lot of screeching and running around

Table 1 (continued)

ORIGINAL EASI SURVEY	MODIFIED EASI SURVEY	NEW SCALE
Part III: Sociability	Part III: Sociability	
1. Child makes friends easily	1. Child makes friends easily	6. Child shows alot of concern for others
2. Child likes to be with others	2. Child likes to be with others	7. Child does not tend to join a group of children already at play
3. Child tends to be shy	3. Child tends to be shy	8. Child is easily comforted by adult attention
4. Child tends to be independent	4. Child prefers to play by him/her self rather than with others	9. When the child wants something to do he/she usually plays with toys, watches t.v. or finds something to do alone
5. Child seeks out attention of others	5. Child seeks out attention of others	10. Child does not openly express affection for others
Part IV: Impulsivity	Part IV: Impulsivity	
1. Child tends to be impulsive	1. Child tends to be impulsive	6. Most of the time the child's behavior seems to be guided by a purpose or goal
2. Learning self-control is difficult for the child	2. Learning self-control is difficult for the child	7. Child is cautious
3. The child gets bored easily	3. The child gets bored easily	8. Child often gets into situations beyond his or her capacity (Does not "look before he leaps")
4. The child learns to resist temptation easily	4. The child learns to resist temptation easily	9. Child tends to persist even on difficult tasks
5. The child goes from toy to toy quickly	5. The child goes from toy to toy quickly	10. Child is easily distracted
Part V: Adaptability		1. Child adapts easily to change
		2. Child's behavior tends to be erratic or hard to predict
		3, Child's behavior shows that limits are accepted even if they are initially resisted
		4. Child is able to make changes in his/her play (e.g. When necessary materials are not available)
		5. Child shows the same pattern of daily routines (e.g. times of hunger or fatigue)

Table 2

Temperament Trait Correlations: Parent x Teacher

	Modified EASI Scales	New Scales	Combined
Emotionality	.35*	.16	.32*
Activity	.51**	.46**	.55***
Sociability	.32*	.13	.29*
Impulsivity	.17	.36*	.31
Adaptability		.29	

* $p < .05$

** $p < .01$

*** $p < .001$